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(54) Title: FLUOROCOMBRETASTATIN AND DERIVATIVES THEREOF

synthesis of difluorocombretastatin

(57) Abstract: The present invention is related to new derivatives of Combretastatin, of Formula (I) obtained by total synthesis. The strategy developed for each of the compounds is to i) replace a halogen (i.e. fluorine atom) to hydrogen on olefinic bound; ii) replace an aromatic ring in a natural product with an amino-aromatic ring. Said compounds recognize and bind the tubulin site: are useful for treating pathological states which arise from or are exacerbated by cell proliferation - as anticancer and/or antiangiogenic activity, in a mammal - to pharmaceutical compositions comprising these compounds.

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